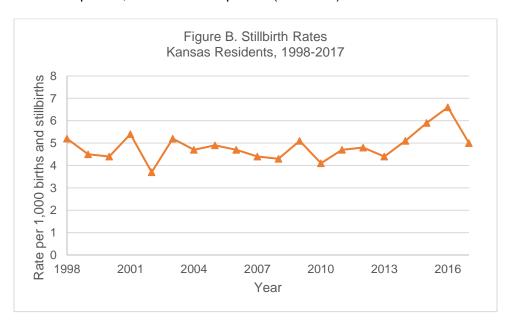
# Fetal, Infant and Maternal Mortality

### **Stillbirths**

Reporting standards for stillbirths changed mid-year 2014. During the first half of the year, reporting was mandatory for stillbirths with delivery weight greater than 350 grams. During the second half of the year, reporting was mandatory for stillbirths at 20 weeks or longer clinical estimate of gestation. Thus, rates for 2015, 2016, and 2017 are not strictly comparable to those of previous years. While some physicians still report stillbirths at less than 20 weeks gestation, those events are no longer included in the Annual Summary of Vital Statistics. Multi-year tables with data for 2015 and 2016 have been amended to remove those events.

During 2017, there were 184 stillbirths reported for Kansas resident mothers, a decrease of 27.0 percent from the 252 stillbirths reported in 2016. The stillbirth rate was 5.0 per 1,000 live births and stillbirths, a decrease of 24.2 percent from the rate of 6.6 stillbirths per 1,000 live births and stillbirths in 2016 (Tables D1, A3).

In 2017, the stillbirth rate (per 1,000 live births plus stillbirths) was 5.1 for White non-Hispanics, 7.7 for Black non-Hispanics, and 4.2 for Hispanics (Table A3).



Over the past 20 years (1998-2017), annual stillbirth rates have fluctuated, but Poisson regression (calculated with the Joinpoint program) indicates that the general trend was downward, but not statistically significant, for 1998-2011, and upwards but not statistically significant for 2011-2017. The latter period can be discounted, since it includes the years where the stillbirth definition changed (Figure B).

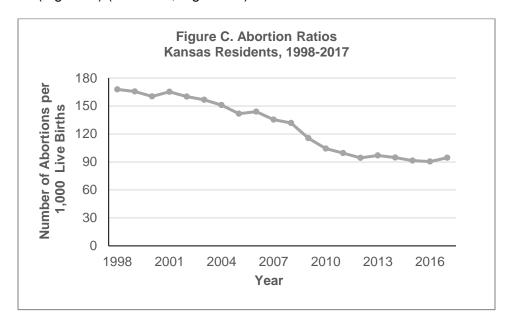
Of all stillbirths in 2017, 89.7 percent (165 out of 184) were attributed to conditions originating in the perinatal period and 9.8 percent (18 out of 184) to congenital anomalies (Table D1).

### **Abortions**

In 2017, there were 3,450 abortions performed on Kansas residents, of which 3,371 were performed in Kansas, and 79 were performed out-of-state (Table D5). There were also 3,376 abortions performed in Kansas for non-residents (Table D4).

#### **Abortion Ratios**

The abortion ratio for Kansas residents in 2017 increased 4.2 percentage points (94.6 per 1,000 live births) from 90.4 in 2016. The abortion ratio declined by 43.6 percent from 1998 to 2017, from a peak ratio of 167.8 abortions per 1,000 live births in 1998 to 94.6 abortions per 1,000 live births in 2017 (Figure C) (Table D3, Figure D2).



The abortion ratio for Kansas residents in 2017 varied substantially by age-group of the mother. The highest ratio (769.2 per 1,000 live births) was recorded for mothers under 15 years of age, while the lowest (59.7 per 1,000 live births) was recorded for mothers in the 30-34 age group (Figure D3).

The abortion ratio for White non-Hispanics was 76.8 abortions per 1,000 live births (1,953 resident abortions); for Black non-Hispanics it was 224.1 (552 resident abortions); and for Hispanics it was 109.8 (629 resident abortions) (Table C20, Table D5).

#### Gestation at Termination

In 2017, 70.2 percent of Kansas resident abortions occurred prior to nine completed weeks of gestational age. About 90.2 percent were performed prior to the 13<sup>th</sup> week of gestation and 4.1 percent of Kansas resident women obtained an abortion after 16 weeks gestation. (Table D5).

#### Marital Status

More than 80 percent (84.5) of all reported abortions in 2017 were to unmarried women. Among Black non-Hispanic women in this group, 91.6 percent were unmarried, while 83.2 percent of White non-Hispanic women and 86.8 percent of Hispanic women were unmarried (Table D6).

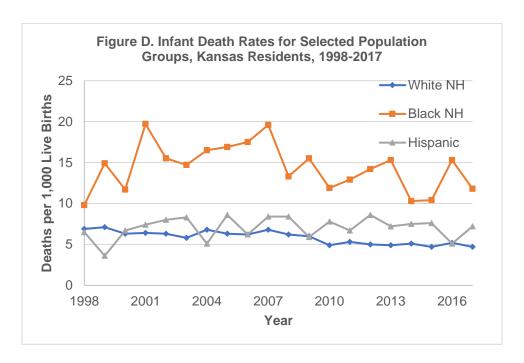
# **Infant Mortality**

There were 217 infant deaths to Kansas residents in 2017, a decrease of 2.7 percent from 223 infant deaths in 2016 (Table D14).

The infant mortality rate for Kansas residents in 2017 was 6.0 infant deaths per 1,000 live births, up 1.7 percent from 5.9 infant deaths per 1,000 live births in 2016. This meets the Healthy People 2020 target for infant deaths, 6.0 infant deaths per 1,000 live births (MICH-1.3).

The rate for White non-Hispanic mothers in 2017 was 4.7 deaths per 1,000 live births, a decrease of 9.6 percent from the rate of 5.2 in 2016. The rate for Black non-Hispanic mothers was 11.8 deaths per 1,000 live births, a decrease of 22.4 percent from the rate of 15.2 in 2016. The rate for Hispanic mothers was 7.2 deaths per 1,000 live births, an increase of 41.2 percent from the rate of 5.1 in 2016. Caution should be used in interpreting these changes due to the relatively small number of occurrences and yearly fluctuations (Tables D12, A3).

Infant death rates for Black non-Hispanic mothers have consistently remained higher than those of White non-Hispanic and Hispanic mothers for the past twenty years (1998-2017). Rates for Hispanic mothers have sometimes been higher and sometimes lower than those for White non-Hispanic mothers (Figure D).



# Infant Age at Death

Infant deaths are most likely to occur within the first month of life. In 2017, 47.0 percent of all infant deaths occurred in the first day of life, 59.0 percent occurred within the first seven days of life (the hebdomadal period), and 71.0 percent occurred within the first 28 days of life (the neonatal period) (Table D13).

The components of perinatal period III mortality (see definition in Technical Notes) both changed from 2016 to 2017; stillbirths decreased by 27.0 percent, hebdomadal deaths increased by 7.0 percent. There were 312 perinatal period III deaths in 2017, for a death rate of

8.5 deaths per 1,000 live births plus stillbirths, a decrease of 1.2 percent from the 1998 rate of 8.6 (Table D10).

Of all infant deaths in 2017, 49.3 percent were attributed to conditions originating in the perinatal period, 24.4 percent to congenital anomalies, 6.0 percent to sudden infant death syndrome (SIDS), and 20.3 percent to all other causes (Table D13).

## Maternal Mortality

In the 2008 report, Kansas adopted the definition of "maternal death" used by the National Center for Health Statistics (NCHS), and introduced a new category called "other pregnancy associated deaths." Please see the Technical Notes for full definitions. The new categories were applied retroactively to 2005; before 2005 the Kansas death certificate lacked an important field needed to identify pregnancy associated deaths. In 2017, there were eight maternal deaths and nine other pregnancy associated deaths, an overall decrease from 2016, when there were eight maternal deaths and twelve other pregnancy associated deaths (Figure D8).